

REMARKS

The Office Action dated December 1, 2003, has been received and carefully noted. The amendments made herein and the following remarks are submitted as a full and complete response thereto.

Claims 4-6 have been cancelled without prejudice. Accordingly, claims 1-3 are pending in the present application and are respectfully submitted for consideration.

Claims 1-6 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hamabe et al. (U.S. Patent No. 5,319,795, "Hamabe"). Claims 4-6 have been cancelled without prejudice and therefore the rejection with respect to these claims are now moot. As for claims 1-3, Applicant respectfully traverses the rejection and submits that each of claims 1-3 recites subject matter that is neither disclosed nor suggested by the cited prior art.

Claim 1 recites a radio base station for performing a radio communication with a plurality of mobile stations with a space division multiplex method. The radio base station is characterized by transmitting an instruction to stop performing a diversity reception to a mobile station, which the radio base station is to communicate with by the space division multiplex method.

Accordingly, at least one of the essential features of the present invention is the step of "transmitting an instruction to stop performing a diversity reception to a mobile station, which the radio base station is to communicate with by the space division multiplex method." As such, the present invention results in the advantage of providing a radio base station that prohibit deterioration of communication quality that occurs

when the base station uses the space division multiplex to communicate with the mobile station performing the diversity reception

It is respectfully submitted that the prior art fails to disclose or suggest the elements of the Applicant's invention as set forth in claims 1-3, and therefore fails to provide the advantages that are provided by the present application.

FIG. 2 of Hamabe discloses a mobile terminal having an antenna 11, a diplexer 12, and receivers 13-1, 13-2 to which local carriers are supplied from frequency synthesizers 14-1 and 14-2 under control of a controller 15. The outputs of receivers 13-1 and 13-2 of Hamabe are coupled to diversity combiner 16 in which signals received from neighboring base stations are diversity combined in a manner as will be described. The output of diversity combiner 16 is applied to a hybrid circuit 19 and thence to a handset 20. Transmit signal from the handset is coupled through hybrid 19 to a transmitter 17 whose carrier frequency is supplied from a frequency synthesizer 18 under control of the controller 15.

Applicant respectfully submits that each and every element recited within claim 1 is neither disclosed nor suggested by Hamabe. In particular, Applicant submits that the radio base station for performing a radio communication with a plurality of mobile stations with a space division multiplex method as recited in the present application is clearly distinct from that which is illustrated by the combination of the cited prior art. Specifically, it is submitted that the cited prior art fails to disclose or suggest at least the limiting element of "transmitting an instruction to stop performing a diversity reception to

a mobile station, which the radio base station is to communicate with by the space division multiplex method."

It is submitted that the present invention enables each mobile station, after receiving the diversity reception stop instruction, to stop the diversity reception. The present invention provides a space division multiplexing method, which is a multiplexing connection method in radio communication in which an adaptive-array radio base station communicates with a plurality of mobile stations simultaneously by forming a different directional pattern for each mobile station on each carrier of the same frequency simultaneously.

In contrast, the base stations disclosed in the Hamabe merely perform communications by time division multiplexing. In fact, Hamabe does not disclose or suggest space division multiplexing method anywhere in the reference. The Hamabe reference only refers to time division multiplexing method.

For example, Hamabe discloses a hand-off method in which a plurality of base stations perform diversity combining for combining transmission signals received from a particular mobile station in a location to communicate with the plurality of base stations. The hand-off method of Hamabe hands-off a communication with the mobile station from one base station to another base station, at least one frequency is assigned to neighboring base stations, and the shared frequency is used as a transmission frequency for a mobile station when the mobile station is in a location where the mobile station can communicate with the base stations.

Therefore, Hamabe provides that the base stations can always use unique frequencies when the diversity reception is not required, and can use the shared frequency as a transmission frequency of the mobile station only when the diversity reception is required. Applicant submits that the structure and method of Hamabe is neither comparable nor analogous to the present invention.

In addition, Applicant submits that Hamabe does not address the problem of preventing the deterioration of communication quality that occurs when the base station uses the space division multiplex to communicate with the mobile station performing the diversity reception, which is clearly dealt with by the present invention.

Furthermore, the Examiner noted column 9, lines 1-12 of Hamabe as purportedly showing the limitation of "transmitting an instruction to stop performing a diversity reception to a mobile station which the radio base station is to communicate with by the space division multiplex method" as recited in claim 1 of the present application. Applicant respectfully disagrees with the Examiner's position.

Specifically, column 9, lines 1-12 of Hamabe discloses that base stations X and Y judges whether to perform the diversity combining in accordance with the reception level of a signal received from a mobile station that is moving and changing its position relative to the base stations. This is clearly different from "transmitting an instruction to stop performing a diversity reception to a mobile station which the radio base station is to communicate with by the space division multiplex method" of the present invention.

In view of the rebuttal arguments above, Applicant submits that Hamabe fails to disclose each and every limitation of claim 1 of the present application, and therefore is allowable.


As claims 2-3 depend from claim 1, Applicant submits that each of these claims incorporates the patentable aspects therein, and is therefore allowable for at least the reasons set forth above with respect to the independent claims.

In view of the above, Applicant respectfully submits that each of claims 1-3 recites subject matter that is neither disclosed nor suggested in the cited prior art. Applicant also submits that the subject matter is more than sufficient to render the claims non-obvious to a person of ordinary skill in the art, and therefore respectfully request that claims 1-3 be found allowable and that this application be passed to issue.

If for any reason, the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact the Applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper has not been timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300 referencing Attorney Docket No. 101201-00013.

Respectfully submitted,



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Enclosures: Petition for Extension of Time (3 months)